

Report Number: ICRR0022879

## 1. Project Data

Project ID P144029	<b>Project Name</b> The Power Recovery Project	•			
<b>Country</b> Albania	Practice Area(Lead) Energy & Extractives				
L/C/TF Number(s) IBRD-84290	Closing Date (Original) 30-Nov-2019	Total Project Cost (USD) 84,481,687.62			
Bank Approval Date 29-Sep-2014	Closing Date (Actual) 30-Jun-2021				
	IBRD/IDA (USD)	Grants (USD)			
Original Commitment	150,000,000.00	0.00			
Revised Commitment	126,380,800.62	0.00			
Actual	84,512,506.98	0.00			
Actual	84,512,506.98				

Prepared by Joel J. Maweni Reviewed by Fernando Manibog ICR Review Coordinator Ramachandra Jammi Group IEGSD (Unit 4)

## 2. Project Objectives and Components

a. Objectives

The objective of the project is to improve reliability of power supply and financial viability of the power sector (Loan Agreement dated November 3, 2014, Schedule 1, page 6).

The project development objective (PDO) is parsed into two parts for the purpose of evaluation as follows:

Objective 1: To improve reliability of power supply.



Objective 2: To improve financial viability of the power sector.

- b. Were the project objectives/key associated outcome targets revised during implementation? No
- c. Will a split evaluation be undertaken? No
- d. Components

# Component 1: Short Term Complementary Power Import Support: Estimated cost at appraisal US\$30.00 million, Actual cost US\$25.55 million)

The purpose of this component was to support *Korporata Elektroenergjetike Shqiptare* (Albanian Power Corporation - KESh) with the financing of complementary power imports to meet their short-term power supply obligations and to enable the build-up of adequate reservoir levels at the Drin cascade over the period of the project. This activity was to be complemented by analytical work under component 4 to develop a robust risk management strategy for the mitigation of weather-related volatility.

## Component 2: Upgrading Distribution Infrastructure: (Estimated cost at appraisal – US\$138.30 million, Actual cost US\$ 43.53 million)

The objective of this component was to support the Government of Albania (GoA) and its power distribution company, *Operatori i Shperndarjes se EnergjiseElektrike* (OShEE) in implementing their plan to reduce distribution losses, improve cash collection and reliability of power supply. The four subcomponents were:

- 1. Upgrading the sub-transmission distribution system to upgrade system reliability in Tirana area by reinforcing two existing 35/MV substations (SSs) to 110/MV SSs with new 110 kV lines.
- Targeted investments in the medium voltage grid (6-20kV) comprising MV cable lines, LV ABC lines, LV concentric cable and concrete poles, MV metal clad switchgears, and MV/LV distribution cabins with associated LV metering facilities.
- 3. Metering systems in the LV network consisted of the purchase and installation of about 230,000 single and three-phase meters; low voltage coaxial cables; ABC cables and accessories; and three-phase regular conductor cables.
- 4. Upgrading the billing and collection system and provision of any required training for its implementation.

## Component 3: Transmission Meter/Data Center Upgrade: (Estimated cost at appraisal – US\$26.00 million, Actual cost to completion – US\$11.74 million)

This component was to support the move of medium voltage commercial customers into the deregulated market, which was the next step after the earlier move of industrial customers in 2011. The two subcomponents included:

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# Component 3: Transmission Meter/Data Center Upgrade: (Estimated cost at appraisal – US\$26.00 million, Actual cost to completion – US\$11.74 million)

This component was to support the move of medium voltage commercial customers into the deregulated market, which was the next step after the earlier move of industrial customers in 2011. The two subcomponents included:

- 1. (Operatori i Sistemit të Transmetimit (Transmission System Operator- OST) investments in meters for MV customers, MV feeders, IPPs and data center: The project will finance power meters and upgrade a data center at OST.
- 2. IT systems and rules: Under this subcomponent, the project will finance supplying and installing an IT system for the data center and providing technical assistance for developing procedures for the establishment of a market platform for IPP's and eligible customers, among others.

# Component 4: Supporting Power Sector Reforms and Project Implementation: (Estimated cost at appraisal – US\$7 million, Actual cost to completion – US\$3.38 million)

This component comprised:

 The following sector reforms to facilitate the recovery of the power sector and improve the performance of the distribution company: (i) revision of the power market model to introduce more competition in the sector and reduce the Borrower's power supply obligation as per the relevant EU directives; (ii) revision of the renewable energy law to ensure sustainability of independent power producers; (iii) introduction of a new cost-recovery tariff methodology to reflect updates in the power



market model; iv) updating of the Borrower's current energy strategy; and (v) design implementation and monitoring of social outreach programs targeting electricity consumers and key stakeholders.

- 2. Project implementation support: entailing establishment of a Project Management Unit, within the Ministry of Energy and Industry (MoEI) through recruitment of relevant staff and provision of goods, operating costs, and technical advisory services.
- 3. Management advisory services to support the implementation and monitoring of OSHEE's Performance Management Program, including among others, loss reduction and collections increase for the period of the project.
- 4. Risk management mechanism for weather volatility involving the carrying out of a risk management study to mitigate the impacts of weather volatility.
- e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project Cost and Financing: Total project cost at completion was US\$84.20million (ICR, Annex 3, p. 42) compared to US\$201.3 million estimated at appraisal (PAD, Table 1, p. 9). The financing plan at appraisal envisaged that US\$150 million of the total cost would be financed by the World Bank Loan with the Borrower's contribution covering the balance of US\$ 51.3 million (PAD, Datasheet, p. ii). However, the actual total project cost was fully financed by the World Bank Loan and there was no contribution from the Borrower. Further, the ICR shows a total project cost of US\$84.2 million compared to US\$84.5 million system derived cost according to the datasheet, a discrepancy of US\$0.3 million.

**Dates**: The project was approved on September 29, 2014, and it became effective on January 30, 2015. The project was restructured twice. The first restructuring was approved on November 26, 2019, to extend the Loan closing date for 12 months to November 30, 2020. The objective of the loan closing date extension was to implement a partial cancellation of savings of EUR 17.6 million under the IBRD Loan arising from restructuring of the project, allow adequate time for completion of some activities under components 2 and 3, and to update the project's results framework and to revise the legal covenant related to OSHEE's escrow account. The second restructuring was retroactively approved on December 20, 2020, to extend the closing date by seven months to June 30, 2021, to allow enough time for completion of some activities whose implementation had been disrupted due to the coronavirus pandemic. The delay in extending the closing date was caused by lengthy internal procedures within the Government of Albania (GoA) and processing delays due to pandemic disruptions. The project closed on June 30, 2021,19 months after the original closing date of November 30, 2019.

## 3. Relevance of Objectives

## Rationale

**Alignment with The World Bank strategies**: The Project was prepared and implemented under two World Bank strategies for Albania – the Country Partnership Strategy (CPS) for FY2011-FY2014 (Report No. Report No. 54188–AL), and the Country Partnership Framework (CPF) for FY2015-FY2019 (Report No. 98254). The FY2015-19 CPF was extended through FY2019/20 under the Performance Learning Review of 2018 (Report No. 131038-AL). The CPF remained in effect at the closing date of the project because preparation of a new CPF in 2020 was delayed by Covid-19 and the Albanian general elections in 2021.The



project sought to address the key developmental issues of unreliability of power supply and the fiscal burden caused by the sector's poor financial performance. The CPS had highlighted that Albanian firms of all sizes regularly cited the unreliability and poor quality of electricity supply as being among the most critical business constraints (PAD, p.5). Several factors contributed to the unreliability of power supply, including, fluctuations in hydropower (the main source of power for Albania) due to hydrological variations, tight supply capacity in the regional countries, transmission capacity constraints and inefficiencies at the distribution level – especially high distribution losses and poor rates of revenue collection.

The World Bank's strategy for Albania at project closure (CPF FY2015-FY2019) was organized around three strategic objectives of: (i) restoring macroeconomic balances, (ii) creating the conditions for accelerated private sector growth, and (iii) strengthening public sector management and service delivery. The project was strongly aligned with the CPF strategic objective of creating conditions for private sector growth and, particularly with the sub-objective of supporting enhanced energy security, efficiency, and supply.

The project addressed these issues by: (i) financing of short-term imports, thus helping KESh and KESh/WPS (the generation company and its wholesale power supplier agency) to meet their supply obligations to the regulated market while also diversifying sources of supply, and allowing for water reservoirs to fill up; (ii) supporting investments in the distribution system to improve system reliability, reduce losses, and improve billing and revenue collection; and (iii) financing meters for MV customers, MV feeders and IPPs and increasing the capacity of the transmission data center to support deregulation of MV commercial customers which would reduce KESh's power supply obligations and the fiscal burden through GoA guarantees.

**Country context**: The CPS was aligned the GoA priorities as expressed in the National Strategy for Development and Integration for 2007–13 (NSDI 1) and National Strategy for Development and Integration for 2015–20 (NSDI2). NDSI1 focused on two areas: (i) consolidation of the democratic system notably through electoral, judicial and property rights reform; and (ii) achievement of rapid and sustainable economic, human, and social development in line with EU criteria. Similarly, a key goal under NSDI 2 was to enhance competitiveness in key growth sectors by, among other measures, addressing infrastructure constraints, including energy. The CPS and CPF were well aligned with the NSDI1 and NSDI2 and the PDOs were aligned with both the World Bank's and the GoA's strategies for the sector.

The PDOs were achievable, and outcome oriented with clear measurable indicators regarding reduction in system losses and improvement in reliability in the project area and distribution company level improvements in revenue collection and arrears indicators. The design of the project was appropriate for the sector's implementation capacity with the support of management advisory services in some areas such as on implementation of OSHEE's performance management plan and development of a risk management strategy for mitigating the impact of weather volatility on the sector.

The PDO is rated **High** for relevance because it was aligned with both the World Bank's strategy for Albania (CPF FY2015-19) and the Government NSDI 2 (FY2015-20) in seeking to relieve energy constraints to the competitiveness of key growth sectors. As further evidence of its high relevance, the PDO focused on improving reliability of electricity supply which has been regularly identified by Albanian firms as a key business constraint.



## Rating

High

## 4. Achievement of Objectives (Efficacy)

## **OBJECTIVE 1**

**Objective** To improve reliability of power supply

## Rationale THEORY OF CHANGE

The ICR constructed a theory of change (TOC) based on the project design described in the PAD (page 8 of the ICR). The TOC was that upgrading the sub-transmission distribution system in Tirana area – an activity under the Upgrading Distribution Infrastructure component would improve the reliability of power supply.

The expected outcome was improved reliability resulting from the improved network in Tirana. The indicator of reliability was revised during project restructuring in November 2019 from reliability of MV level network in the Tirana area ("percentage overload in the project area") to "added capacity of medium-voltage network level at Tirana area (Mega Volt Amp [MVA]). The target was accordingly revised from 70 percent overload in the project area to 80 Mega Volt Ampere (MVA) of distribution capacity added in the MV network in Tirana. The reason for the change in indicator was to measure the impact of the investment under the project rather than for the Tirana area which the original indicator was doing. The shortcomings of the original indicator were that it was measuring Tirana system impacts of the project which would also be affected by other activities outside the project. The revised indicator was also limited in that it measured outputs - added capacity instead of outcomes and in addition focused on the impact of one investment and excluding the impact of the upgrade of the distribution system (installation of transformers cabins and cables in several places) which was implemented, the extension of the supervisory control and data acquisition (SCADA) system to twelve substations and the installation of communication links to OST's control center which was completed in immediately after loan closure in July 2021. Further, the substantial reduction in system losses contributed to improved reliability of power supply through increased availability of energy to consumers.

## OUTPUTS

The outputs from upgrading of the electricity distribution infrastructure in Tirana were as follows:

- 1. Construction of the 80 MVA Kombinat distribution substation was completed.
- 2. Distribution transformer cabins and cables were installed in Tirana and several other locations (Fushe Kruje, Durres, Kavaje, Lushnje, Fier, and Vlore).
- 3. OShEE's distribution SCADA was extended to 12 substations and communication links with OST's control center were established.



4. Three (3) existing substations were rehabilitated in Tirana (Traktora, Farka, Kashari).

#### OUTCOMES

The outcome indicator of "added capacity of medium-voltage network level at Tirana area" was achieved with the construction of the Kombinat 80 MVA substation.

The project's main contribution is the significant improvement in OShEE's system-wide reliability indicators– system average interruption duration index (SAIDI) and system average interruption frequency index (SAIFI). The ICR cited OShEE's business plan which stated that SAIDI and SAIFI had decreased from 122.00 hours to 58.79 hours and 49.10 to 29.99, respectively, between 2015 and 2019. In Tirana, the main load center, SAIFI and SAIDI reduced from 43 to 17 and 84 hours to 27 hours, respectively, between 2015 and 2020.

Assessed against the outcome indicator and target specified in the project design, the objective of improving reliability of power supply was achieved. Despite the limitations of the indicator as described above the improvements in system SAIDI and SAIFI indicators (and for the Tirana area) to which the project contributed and the substantial reduction in system losses provides credible evidence that this objective was achieved. The objective of improving reliability of power supply is accordingly rated **Substantial**.

Rating Substantial

## **OBJECTIVE 2**

**Objective** To improve financial viability of the power sector

## Rationale THEORY of CHANGE

The theory of change was that improving financial viability of the sector would result from implementing measures to reduce system losses, improve revenue generation and collection and reduce huge

intercompany arrears. At project appraisal the sector was in a precarious financial condition with large, accumulated deficits amounting to US\$550 million in 2015 which were expected increase to US\$ 800 million in 2018. A key factor which contributed to the sector's dire financial performance was inefficiencies in the distribution sector, especially staggering system losses of about 45% in 2014 and a revenue collection rate of only 78 percent. In 2013 OSHEE had just been returned to Government control after a privatization attempt in 2009 had failed to address the sector's financial problems which had deepened with a deterioration in system losses and collection rates, and the expected investments (about US\$150 million) had not materialized. The TOC envisaged that reductions in system losses and improvements in collection rates and intercompany arears would result from implementation of the following activities:

1. Upgrading of the sub-transmission distribution system in the Tirana area, installation of metering systems in the LV network, and upgrading billing and collection systems. In addition, the improved



network would result in increased reliability of power supply and, therefore, more energy available for sale and enhanced revenue generation for OShEE.

2. The ICR also linked technical assistance provided under component 4 on a metering strategy and on developing a new cost recovery methodology to the objective of improving the sector's financial viability, the first through reduction of system losses and the latter through more efficient pricing of electricity.

## OUTPUTS

The outputs expected from implementation of the above activities were as follows:

- An upgraded sub transmission distribution network in Tirana, including the 80 Mega Volt-Amperes (MVA) Kombinat substation. Upgrading of the distribution feeder lines and associated infrastructure was partial with about 44 distribution feeder lines upgraded instead of the expected 55 lines leaving 11 feeder lines without upgraded substations. The distribution SCADA was extended to 12 distribution substations and communication links with OST's control center established by July 2021. Overall, this output target was partially achieved.
- 2. Installation of meters installed in the LV network: About 230,000 single and three-phase meters were installed in the LV network by OShEE.
- 3. About 2,338 additional meters were to be installed by OST for metering of MV customers, MV feeders, IPPs and for upgrading the data center. The actual number of meters installed was 1,704. This output was partially achieved.
- 4. An upgraded billing and collection system for OShEE: The distribution company's billing and metering system was to be improved to reduce non-technical losses and improve revenue generation and collection. The system was satisfactorily upgraded, and target output was achieved.
- 5. A metering strategy and a new methodology for cost recovery electricity prices. These outputs, which were to be produced through technical assistance support under the project, were completed outside the project with the support of other donors. The funding allocated under the project was canceled during the first restructuring on November 26, 2019. These outputs were achieved although not under the project.

## OUTCOMES

The outcomes that signal the achievement of financial viability improvements were:

- 1. The target was a substantial reduction in system losses from 45 percent in 2014 to 23 percent at project close. The original end of project target of 14 percent was revised during the Project Restructuring approved in November 2019 because the scope of MV balancing meters which were to contribute to loss reduction could not be procured in time. Nonetheless, the revised target represented a substantial reduction in losses. The reduction in distribution losses would translate to significant financial viability benefits by increasing revenue from additional sales to customers or reducing power generation/import costs to meet a given level of electricity demand Upgrading of sub-transmission systems, metering investments in the MV and LV networks and upgrading of the billing and collection systems contributed to a reduction in systems losses from 45 percent to 22,6 percent slightly exceeding the target of 23 percent. **Achieved.**
- 2. The targeted improvement in the billing and collection system was to increase collection rates from 78 percent in 2014 to 93 percent in June 2021. The billing and collection system was installed and helped



OSHEE to improve its collection rate to 95.3 percent, thus exceeding the targeted rate of 93 percent. Achieved.

3. The level of intercompany arrears was 1,290 days (November 2020) slightly above the baseline of 1200 days and substantially above the target of 550 days. The intercompany arrears remained elevated because of several reasons: the agreement for OSHEE's arrears to be paid over 10 years with the support of the European Bank for Reconstruction and Development (EBRD), disputes among the utilities regarding balancing costs which are being handled by the courts, and lack of liquidity in the sector due to the high costs of imports in recent years. Not Achieved.

The outcome indicator on intercompany arrears was not tied to specific activities but would be an outcome of a general improvement in the finances of the electricity distribution company which is responsible for the bulk of the arrears to OST and KESH. However, it became clear that the indicator would not be met when the EBRD arrangements to finance KESH's short term loans was reached, including the agreement for OSHEE's arrears to be paid over a ten-year period. The outcome indicator on intercompany arrears should have been revised.

With two out three indicator targets fully achieved and one not achieved, the efficacy rating for the objective of improved financial viability is **Modest**.

Rating Modest

## **OVERALL EFFICACY**

#### Rationale

The project fully achieved the objective of improving reliability of power supply (Objective 1), but the objective of improving financial viability (Objective 2) was only partially met because one of the three outcome targets was not achieved. The efficacy rating for the Objective 1 is rated **Substantial** while that of Objective 2 is rated **Modes**t. Although the indicator for Objective 1 was not adequate to fully capture the impact of the project's activities, there was credible evidence on loss reduction, based on SAIDI and SAIFI data, that the project had a significant impact on reliability of electricity supply.

The overall efficacy rating for the project is **Substantial** because of a strong **Substantial** rating for Objective 1.

**Overall Efficacy Rating** 

Substantial

## 5. Efficiency



At appraisal the project's EIRR was estimated at 12.1 percent compared to the ICR's revised estimate of 6.4 percent. Table 1 provides the assumptions used to estimate the EIRR at appraisal and the paragraphs below explain the reasons for the significant difference between the ex-ante and ex post EIRR. Estimated EIRR under different assumptions for valuing benefits from unserved energy and assuming successful implementation of the GoA's current loss reduction plan reduction in losses are provided below.

Costs				
Capital costs	Total project costs – US\$201.3 million			
O&M	5 percent of capital costs			
Discount rate	8 percent			
Benefits	<ol> <li>Reduction in technical losses valued at the cost of power purchase.</li> <li>Reduction in consumption due to decreased non-technical losses valued at the cost of power purchase.</li> <li>Improved power reliability (reflecting reduction in unserved energy) valued at the cost difference between alternative diesel-based standby power generation and the average retail tariff.</li> <li>Import benefit to compensate for the loss of power due to the planned rehabilitation of KESH turbines was valued at the difference between the cost of standby power generation and the average retail tariff. The benefit was assumed to occur in the first year of project implementation.</li> </ol>			

## Table 1: EIRR assumption at appraisal

**Re-estimated EIRR at completion (Case 1).** The calculation uses the same methodology as at appraisal except that: (a) the calculations are based on actual data and results; and (b) the additional up-front benefit assumed at appraisal (item 4 above) is excluded since it did not materialize due to a change in GoA priorities. On this basis, the post-completion estimates are an EIRR of 6.4 percent and a negative ENPV of Lek 1,094 million (US\$10 million).

The comparable figures from the appraisal analysis (i.e., Without the import benefit) are EIRR 8.1 percent and a small positive ENPV at the same discount rate of 8 percent. The difference between the EIRR with both calculations excluding the import benefit, is due to the actual lower benefits than anticipated despite a significant cost saving.

The difference between the estimated EIRR at appraisal (12.1 percent vs 6.4 percent) is accounted for the by two factors: (a) the upfront import benefit included at appraisal but excluded at post completion; and (b) the lower than projected benefits of technical and non-technical losses and unserved energy in the EIRR estimation at completion.

The ICR includes a Case 2 calculation which differs from case 1 in the valuations of unserved energy at the average retail tariff instead of the differential between the average retail tariff and the cost of stand by generation. This results in an ERR of 12.2 percent. Based on the GoA's plan to reduce losses further to 16.5 percent by 2022 the ICR also estimates the project's EIRR assuming the target 16.5 percent is achieved by



2025 and 2029 respectively. The analyses show EIRRs of 22.2 percent and 20.5 percent for 2025 and 2029 respectively.

Administrative efficiency: The project incurred completion delays due to procurement and technical difficulties especially regarding procurement of smart meters. Additional delays arose from the covid pandemic. The ICR notes that the project had cost savings of about 17 percent, but this is also because several activities were dropped. In any case the cost impacts of delays are captured in the economic analysis. Nonetheless the completion delay of about 19 months would have had cost implications on the administrative budgets of the participating companies, government agencies and on the World Bank's supervision budget suggesting less than fully cost-effective project implementation. Given low rate of the EIRR of 6.4 percent using the same methodology as at appraisal compared to the revised appraisal EIRR of 8.1 percent and the modest administrative efficiency, the overall efficiency rating is **Modest**.

## Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	$\checkmark$	12.10	100.00 □ Not Applicable
ICR Estimate	$\checkmark$	6.40	84.00 □ Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

The PDO is rated **High** for relevance because it was aligned with both the World Bank's strategy for Albania (CPF FY2015-19) and the Government NSDI 2 (FY2015-20) in seeking to relieve energy constraints to the competitiveness of key growth sectors. Further, the PDOs focus on improving reliability of electricity supply which has been regularly identified by Albanian firms as a key business constraint.

The overall efficacy rating for the project is **Substantial** because of a strong **Substantial** rating for Objective 1– improve reliability of power supply and a Modest rating for Objective 2 – improve financial viability of the power sector.

Efficiency is rated **Modest** because of a reduced ex post EIRR of 6.4 percent compared to the appraisal EIRR (adjusted for import benefit as discussed above) of 8.1 percent.

With a PDO relevance rating of **High, a Substantial** rating for efficacy and a **Modest** rating for efficiency **the** Outcome rating is **Moderately Satisfactory**.



a. Outcome Rating Moderately Satisfactory

#### 7. Risk to Development Outcome

The project helped the sector to recover from financial crisis and to build a firm foundation for further improvements in energy security and financial sustainability. The distribution sector has stronger indicators for reliability of power supply, revenue collection and distribution losses – the latter although still high are continuing to decline further as the sector completes outstanding measures with its own resources, such as installing MV balancing meters that could not be implemented under the project.

Albania will continue to be vulnerable to the impact of variations in weather patterns on domestic hydropower generation and high cost of imports. Developing a risk mitigation strategy will continue to be an important priority for managing this risk.

The important reform agenda that was initially part of the project and subsequently funded by donors is critical for long term sustainability of the sector and will be important for Albania to continue implementing. These activities include the Albania power exchange, implementing a new energy strategy and cost recovery methodology for an evolving competitive power market.

## 8. Assessment of Bank Performance

#### a. Quality-at-Entry

Overall, the project was well designed but had a few significant shortcomings. The timing of the project was very important at a juncture when the country needed support to address the operational and financial issues related to the failure of the distribution sector privatization. Thus, the project objectives were appropriate given the urgent need to address the twin issues of reliability of electricity supply and the financial crisis in the sector. The physical components were well selected to address infrastructure problems, but it is not clear that Investment Project Financing was the most appropriate instrument for addressing key reforms such as the power market model. A single sector Development Policy Loan series may have been a better instrument to drive such far reaching reforms, which in addition needed coordination among different agencies, especially the Ministry of Finance. Alternatively, a phased Program for Results could have helped to phase the activities, including the policy reforms and to reduce the overload that seems to have occurred. In the end most of the activities included under the reform component were financed by other development partners, sometimes without any consultation with the Bank. Coordination with other donors appear to have been absent or limited but has since improved,

For a project that sought to support an improvement in the financial viability of the sector a package of measures with a set of operational and financial metrics would have been expected with implementation of the package incorporated as an integral part of the results framework. While three PDO indicators are



included to track financial viability improvements additional substantive financial indicators such as cost recovery could have been included. Another gap in the design of the results framework was that the PDO-level reliability was tied to a single substation and yet there were other activities contributing to the same PDO outcome.

Quality-at-Entry Rating Moderately Satisfactory

## b. Quality of supervision

The World Bank task team conducted regular implementation support missions during which meetings were held with client counterparts in the Project Management Unit, Project Implementation Units of the three power companies, consultants, development partners and officials from relevant ministries as needed. The World Bank team was adequately staffed to supervise the project. A co-Team Leader was based in the country and was able to provide appropriate coordination and quick responses to client requests. The project was team-led by two Task Team Leaders for the entire period, thus, providing consistency in approach and on substantive matters. The team was supplemented by consultants to provide adequate support to the client in specialized areas such as procurement of smart meters and related equipment.

The World Bank team prepared Implementation Status and Results Reports (ISRs) at least twice a year and used these to inform the World Bank management on critical issues and clients to focus attention on critical implementation issues. On the client's side the PMU prepared semi-annual progress reports for both their internal use and to share with the World Bank. An in-depth Mid-term Review was conducted in 2018 to assess overall progress and identify issues. By that time the project had been rated moderately unsatisfactory on implementation progress at the end of 2017 and it remained in that status for about 18 months to June 2019. The ICR (page 29) noted that although the MTR surfaced some challenges facing the project which required

project restructuring, such as the delays in balancing meters, it was more than 12 months before the project was restructured in November 2019.

The World Bank's implementation support missions were affected by travel restrictions starting in early 2020 due to the Covid-19 pandemic and had to be conducted virtually. The pandemic contributed to the need for the second extension of credit closing date which was granted retroactively on 20 December 2020.

Shortcomings in the World Bank's implementation support effort included a delay of more than 12 months in restructuring the project after the MTR had identified the need and the non-revision of the indicator on intercompany arrears when it had become apparent that the indicator target would not be achieved due to changes in the circumstances.

Overall, the quality of The World Bank's supervision of the project was Moderately Satisfactory



Quality of Supervision Rating Moderately Satisfactory

Overall Bank Performance Rating Moderately Satisfactory

## 9. M&E Design, Implementation, & Utilization

#### a. M&E Design

The Project M&E system was generally well designed to include baseline data, target values, frequency of reporting, data sources and responsibilities for data collection (Result Framework Annex 1, PAD). The Results Framework (RF) comprised four outcome indicators: electricity losses, collection rate, reliability, and intercompany arrears. The electricity losses indicator had two sub-indicators for non-technical and technical losses, but the sub-indicators were dropped during project restructuring in November 2019. The M&E design provided a framework for assessing the achievement of project objectives.

The ICR correctly points out two important shortcomings in the design of outcome indicators, i.e., that is the linkage of the reliability indicator to one investment (substation) excluding other activities in the project design which contributed to reliability; and the RF could have considered more substantive metrics for assessing progress of financial recovery than intercompany arrears. However, the ICRR assesses that the RF already considered reduction in losses and improvements in bill collection as measures for tracking financial recovery but agrees that more substantive relevant measures could have included cost recovery, and payments to suppliers, for example.

In addition, the RF had seven intermediate indicators to facilitate monitoring of progress towards the achievement of outcomes. The ICR also makes several valid comments on the intermediate indicators, including the following: (a) that no indicators were linked to component 1; and (b) additional or alternative reliability indicators such as the number of rehabilitated MV/LV network feeders could have been included in the results chain – these were tracked during project implementation.

#### b. M&E Implementation

The responsibilities for data collection analysis lay with the parties as laid out in the RF. The PMU consolidated the M&E inputs from KESH, OST and OSHEE and supported them as needed. The PMU shared the M&E reports with the World Bank team which also used the data for inputs into ISRs and for reviews of progress with the client.

As noted above some changes were made to the RF during project implementation and these included the deletion of sub-indicators (i.e., technical, and non-technical losses) for system losses during the project restructuring in November 2019. The ICR notes the delay in implementing this change and points to the non-revision of the intercompany arrears targets even though it had become obvious that the indicator target would not be achieved given the changed context.

Overall, implementation of the M&E system was generally well managed.



## c. M&E Utilization

The M&E system was useful to the World Bank and the clients in monitoring project implementation progress, identifying issues and constraints, deciding on key actions such as project restructurings, including extensions of closing dates. The M&E system was used alongside other systems such as procurement milestones and Financial Management Reports. Overall, the M&E system was a valuable project management tool for both the World Bank and the clients. Project implementation and completion were facilitated by the utilization of M&E framework.

M&E Quality Rating Modest

## 10. Other Issues

#### a. Safeguards

The project triggered two The World Bank policies: Environmental Assessment OP/BP 4.01 and

Involuntary Settlement OP/BP 4.12. It was classified as a Category B project.

The impact on safeguards was not known at the time of project preparation and hence an Environmental and Social Management Framework (ESMF) was prepared. The World Bank-funded TA assisted OSHEE on Environmental and Social (E&S) issues, including for on-site monitoring activities. All issues that arose were resolved onsite. The World Bank safeguards staff held regular meetings with PIUs. E&S reporting was conducted in accordance with the requirements of the ESMF and Environmental and Social Management Plans (ESMP). During the pandemic virtual meetings were held regularly based on reports and works photos provided by the PIUs. Both face to face and virtual meetings with PIUs helped to increase the knowledge and build capacity of counterparts on E&S matters.

OP/BP 4.12 Involuntary Resettlement was triggered in relation to the Kombinat substation which involved land acquisition. Land acquisition was completed in December 2017 based on a Resettlement Action Plan (RAP) prepared for the project. The Kombinat location was chosen after the initial selection of Tirana was dropped to avoid land acquisition-related complexities since Kombinat was under public ownership.

For grievance redress, the project used OSHEE's customer relations mechanism for logging and addressing any project-related complaints in lieu of a stand-alone grievance redress mechanism, which was acceptable to the World Bank.

The overall safeguards ratings for the project remained Satisfactory and the ratings for Environmental Assessment (BP 4.01) and Involuntary Settlement (BP 4.12) were also Satisfactory.



## **b. Fiduciary Compliance**

The final ISR rated financial management Moderately Satisfactory. There were two outstanding audit reports as of June 30, 2021 when the project closed. The delays were attributable to slippages caused by the Covid-19 situation, and to the technical assistance for the improvement of the financial reporting and audit disagreements, in the case of KESH. A functional unbundling process for OSHEE involving, amongst other things, the separation of the accounts and financial statements (including assets and obligations) had also contributed to the delayed submission of audit report. Other than the delayed audits project financial statements submitted over the years were acceptable, and no issues were reported by the auditors.

Procurement was also rated Moderately Satisfactory at project closure due to procurement delays that the project encountered for most of its duration. The delays had led to the cancelation of important MV balancing meters which would have contributed to greater loss reduction than was achieved and were also important to facilitate deregulation of MV customers.

- c. Unintended impacts (Positive or Negative)
- d. Other

#### Gender

The project was not designed to address gender issues but included an indicator for female beneficiaries. The target for females was 52 percent of the beneficiaries by project close. The actual indicator value was 50 percent indicating the efforts made to include females among persons who benefited from access to quality power supply and to citizen engagement on energy matters. There were no negative impacts observed on females due to the project activities.

## Mobilization of private sector financing

The project had no specific focus on attracting private sector financing but improvements in the reliability and affordability of power and in the financial viability of the sector would create conditions for private investors to invest in the country. System losses have decreased significantly, revenue collection has improved and so has the reliability of power supply. Albania will continue to build on this strong base. Private investment will be attracted in several ways. First, existing firms which have held back on

expanding operations may be able to do so with reliable and affordable power. Second, efficiency improvements such as reductions in system losses will help to make power more affordable to small businesses and the informal sector thereby stimulating a sector that is critical for job creation. Third, exporting firms can become more competitive and expand their businesses locally, and finally an efficient and sustainable electricity sector will be attractive for IPPs and other power sector investors.

## Institutional Strengthening



The complexity of the project provided varied opportunities for the participating companies and government agencies to build their capacities in several areas including cutting edge metering technology, coordination and monitoring, and evaluation of a multi-agency procurement packages. OShEE staff benefited from working on loss reduction, billing and revenue collection and improving knowledge on the latest developments in utility management practices.

## 11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR		Substantial	

#### 12. Lessons

The ICR contains substantive lessons learned from the operation. The following suggestions are made to add to or elaborate on some of the lessons that have already been identified:

**Investment Project financing may not be an appropriate instrument for supporting complex projects comprising both infrastructure investments and substantive policy reforms**. The Power Recovery Project contained important policy reforms for development of a power market alongside investment in transmission and distribution which made the operation complex. In the end the reform activities were taken over by other financiers. The World Bank could have selected separate instruments for supporting the infrastructure investments and policy reforms or prioritized between the two areas of engagement.

**Bringing about sustainable policy changes or supporting sector financial recovery requires intensive engagement over time.** The World Bank could have selected a programmatic approach, a DPL series for policy reforms or a Program for Results either of which would have allowed phasing of activities to avoid the overload that appear to have occurred with the Power Recovery Project.

The capacity issues that arose with the PIUs could have been better managed by strengthening the capacity of the PMU not just for financial management, disbursements, and M&E but also on procurement. The utilities' PIUs could be made responsible for technical specifications while the PMU handles the rest of the procurement functions with a capacity building plan for gradual devolution of functions to the utilities.

Designing and implementing power sector financial recovery requires buy-in at high levels in Government because of the political economy issues related to electricity tariffs, governance, transparency, and accountability of institutions. High level participation is key both



at the design stage and during implementation is critical. At a technical level it is important to formulate plans comprising both operational and financial restructuring measures and metrics. In the context of the World Bank operations, getting formal commitment to the whole package for example through DPL prior actions raises the profile of the required actions.

## 13. Assessment Recommended?

No

## 14. Comments on Quality of ICR

Overall, the ICR is well-written, but it also has some shortcomings as follows:

- 1. The justification of overall efficacy rating is confusing because; (i) the reliability and financial viability objectives should have equal weight in assessing the overall efficacy as there is no indication of a hierarchy of objectives in the PAD; and (ii) funding is not a valid basis for weighting objectives in the efficacy assessment.
- 2. Annex 1 Results framework: provides no comments on deviations of actual achievements from targets for most of the indicators.
- 3. There is small discrepancy in the value of the collection rate indicator between the Annex 1, page 32 (97.5 percent) and page 19 of the main text (95.30 percent).
- 4. The results framework (Annex 1) has different dates for actual achievements at completion (November 2020 and June 15, 2021.
- 5. System losses target shown as 23 percent on page 13 (Table 3) of the ICR and on page 5 of the Project Restructuring Paper of 2019 and as 20 percent on pages 19 (Table 6) and 32 (Annex 1) of the ICR.
- a. Quality of ICR Rating Substantial